

REMARKS

This Amendment responds to the Office Action mailed June 6, 2005 in the above-identified application. Based on the foregoing amendments and the following comments, reconsideration and allowance of the application are respectfully requested.

Claims 1-15 were previously pending in the application. By this amendment, claims 2, 3, 5, 13 and 14 are amended, and new claim 16 has been added. Accordingly, claims 1-16 are pending in the application, with claims 1, 9 and 10 being independent claims. No new matter has been added.

The Office Action includes a requirement for restriction. The Examiner has required restriction to one of the following inventions under 35 U.S.C. §121:

- I. Claims 1-8, directed to a generator shutdown control.
- II. Claim 9, directed to a detection of a generator voltage sensor failure.
- III. Claims 10-15, directed to generator control system failure detection.

In response Group I, claims 1-8, is elected for prosecution in the present application.

The requirement for restriction is respectfully traversed. The Examiner has provided only the conclusory statement that “the different inventions have different functions and effects” as a basis for the requirement for restriction, but has provided no specific reasons why the inventions are alleged to be different. It is respectfully submitted that the three claim groups are closely related and should be examined in a single application.

The Examiner is respectfully requested to reconsider the restriction requirement. The third paragraph on page 2 of the application as filed indicates that a generator controller can distinguish between: (1) voltage collapse due to short circuit of the generator output; and (2) apparent voltage collapse due to failure of a voltage sensor. The actions that need to be taken under these circumstances are different, but the events appear the same if only the voltage from the voltage sensor is monitored.

Claims 1-8 relate to the detection of sensor failure in a short circuit condition, and taking an appropriate action, whereas claims 9-15 relate to detection of voltage sensor failure. The events are highly related and merely reflect different ways of looking at the common underlying concept. The Examiner is respectfully requested to reconsider and withdraw the restriction requirement.

The Examiner has objected to the drawings under 37 C.F.R. §1.83(a). The Examiner asserts that the “overload protection”, “plurality of voltage sensors”, and “start-up phase” operation of the controller must be shown in the drawings or the features cancelled from the claims.

It is respectfully submitted that the identified features are in fact shown in the drawings. Overload protection is shown in Fig. 2. Field effect transistor 21, drive circuit 31, latch 32, AND gate 33 and comparator 34 constitute the overload protection. Operation of these components to shut the generator down in the event of a short circuit is described at page 6 lines 7-12. The plurality of voltage sensors is shown in Fig. 2. Rectifying, averaging and conditioning circuit 27 and peak rectifier 30 are the voltage sensors. It is also noted that the three phases are schematically represented as only one phase in Fig. 2 for clarity. The start-up phase is a concept rather than a tangible component. However, Fig. 4, steps 70-76, show events that occur during the start-up phase. Based upon the above discussion, it is submitted that the drawings show the features specified in the claims and therefore meet 37 C.F.R. §1.83(a). Accordingly, withdrawal of the objection to the drawings is respectfully requested.

The Examiner has objected to the specification as not including section headings. While section headings are not required by 37 C.F.R. §1.77(b), section headings have been added in order to advance prosecution of the application. Accordingly, withdrawal of the objection to the specification is respectfully requested.

The Examiner has rejected claims 1-15 under 35 U.S.C. §1.12, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The Examiner asserts that certain claim language is unclear.

The Examiner asserts that claims 1, 9 and 10 are generally narrative and indefinite and fail to conform with current U.S. practice. The Examiner further asserts that claims 1, 9 and 10 appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. However, the Examiner has not identified a single instance of

indefiniteness, a grammatical error or an idiomatic error in claims 1, 9 and 10. In fact, claims 1, 9 and 10 were originally drafted in English by an English patent attorney working in his mother tongue.

In order to provide clarification, claim 1 is discussed in detail. The claim relates to a generator controller. The controller is “responsive to”, that is it responds to “at least one voltage sensor.” The voltage sensor is provided “for measuring a generator output voltage of a generator.” The generator is controlled by the generator controller. Therefore, the phrase “A generator controller responsive to at least one voltage sensor for measuring a generator output voltage of a controlled generator controlled by the generator controller” appears to be appropriate and descriptive.

The generator controller also receives a measurement of generator current. This is described by the phrase “wherein the generator controller is responsive to least one current measuring device for measuring a generator output current.” This phrase also appears to be grammatically correct, bearing in mind the need to have antecedents within the claim.

The controller detects voltage sensor failure and shuts the generator down when this occurs. Sensor failure is inferred when:

- (1) The measured output voltage is less than a threshold voltage, and
- (2) The generator output current is less than a current threshold (large currents flow during a short circuit but not during normal loading).

So as stated in claim 1, “the generator controller is arranged to shut down the controlled generator if the measured output voltage is less than a first threshold voltage and the measured generator output current is less than a current threshold.” This phrase also appears to be correct and descriptive.

A similar analysis may be made of independent claims 9 and 10. It is applicant’s position that claims 1, 9 and 10 are in compliance with 35 U.S.C. §112, second paragraph.

Claim 2 has been amended to refer to “an overload protection measure”, although it is refuted that the amendment is needed to cure a missing antecedent.

Claim 3 was rejected as lacking an antecedent. An amendment has been made. However, it is believed that the Examiner meant to refer to claim 4. Claim 4 appears to be correct since the “generator controller” is recited in line 1 of claim 1.

A minor amendment is made to claim 5, although, again, it is refuted that the claim needs amendment.

Claim 6 appears to be clear, and the Examiner is requested to identify specific claim language that is alleged to be unclear.

Claim 7 does not claim the same features as claim 1 and is not redundant. Claim 1 relates to a generator controller, whereas claim 7 relates to a control system, including a generator controller and the sensors for the controller. Thus, claims 1 and 7 have different scope.

Regarding claim 8, the combination of a generator and its control system is clearly defined.

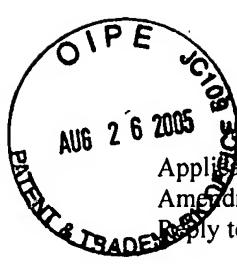
Claim 13 has been amended to delete the phrase “or modified”. The deleted limitation is recited in new claim 16.

A typographical error is corrected in claim 14.

In claim 15, the phrase “further time period” is preceded by “a” and appears to be in conformity with normal practice of claim drafting.

Based upon the above discussion, it is submitted that the amended claims are in full compliance with 35 U.S.C. §112, second paragraph. Accordingly, withdrawal of the rejection is respectfully requested. In the event that the rejection is maintained, a telephone interview is respectfully requested to discuss the alleged instances of indefiniteness and grammatical errors.

In view of the above amendment and discussion, applicant believes the application is in condition for allowance.



Application No. 10/720291
Amendment dated August 24, 2005
Reply to Office Action of June 6, 2005

10

Docket No.: G0720.70000US00

CONCLUSION

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Dated: August 24, 2005

Respectfully submitted,

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